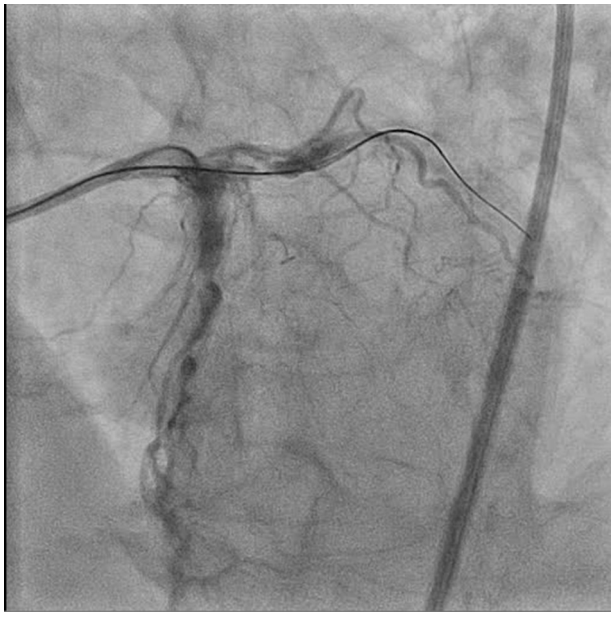
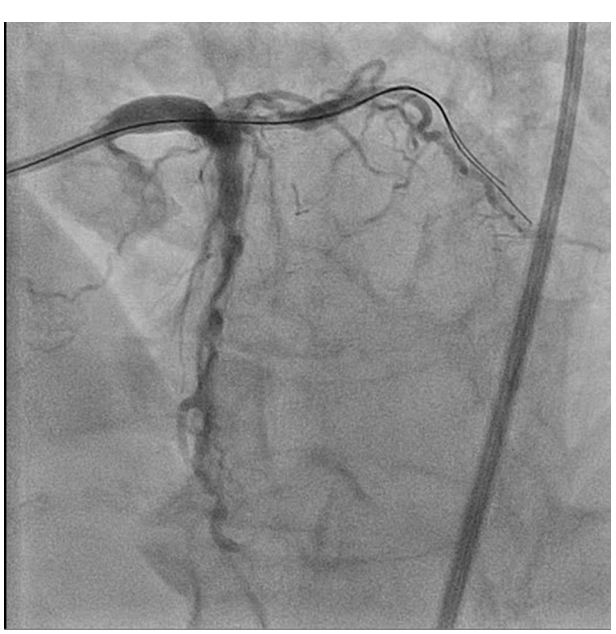




Case Summary. The long and heavy calcified LCX-CTO was successful in interventional revascularization using the "contemporary" parallel wire technique taking full advantage of specification of each wire tip of the "Gaia familes" and the "Confianza pro. Families and supporting of strong backup by the Crusade microcatheter requiring repeated wire re-loading technique into two guidewire lumens of OTW/RX.

TCTAP C-104

LM Bifurcation and Stumpless LAD Ostium CTO

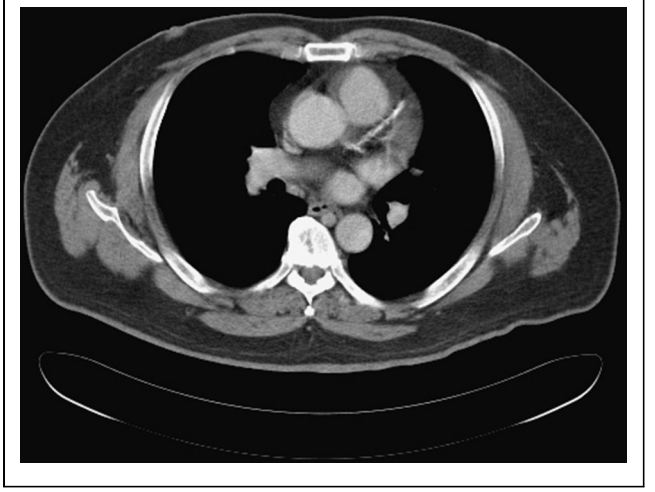
Hsin-I. Teng[1]

[1]Taipei Veterans General Hospital, Taiwan

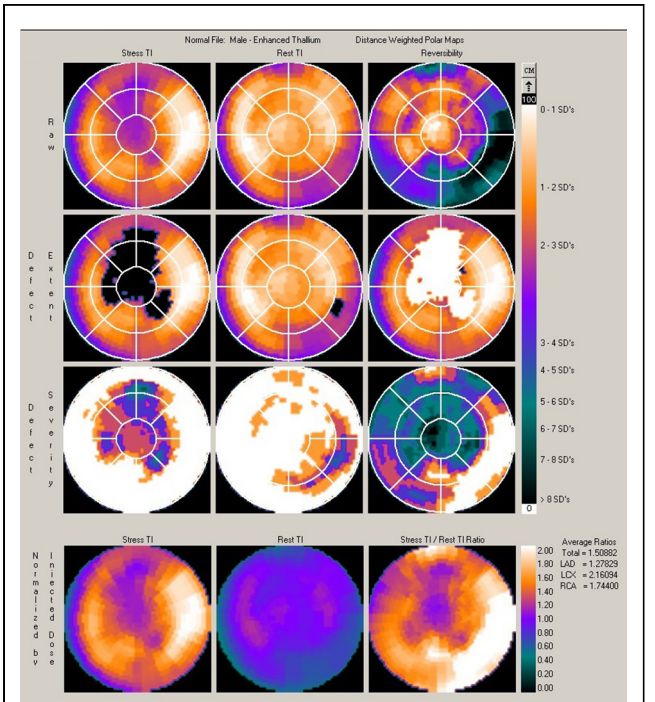
[CLINICAL INFORMATION]

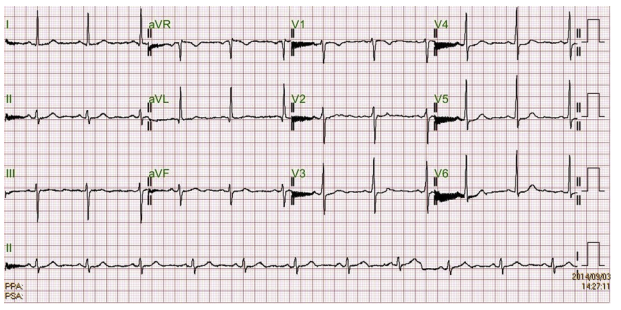
Patient initials or identifier number. Mr. C

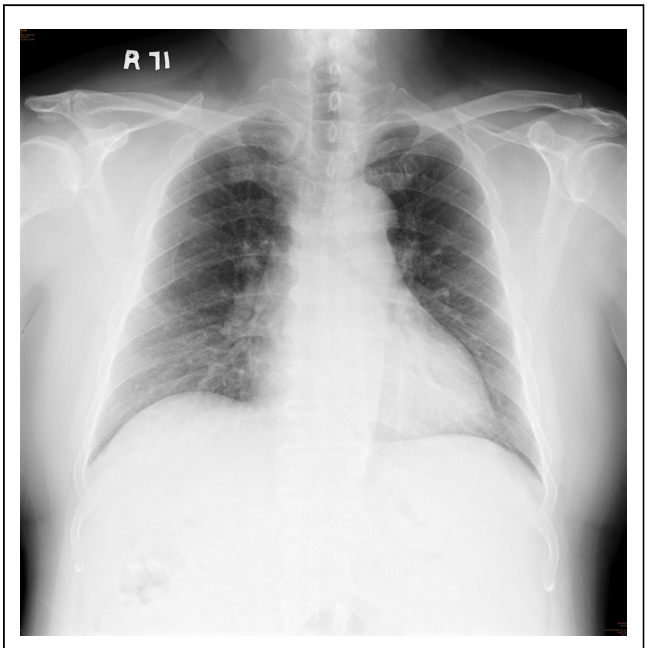
Relevant clinical history and physical exam. This 63 year old man was a heavy smoker. He had diabetes mellitus under insulin control, hypertension and liver cirrhosis, type A. Due to frequent chest tightness attack, he came to our OPD, where heavy calcification was noted on chest CT (for health exam) accidentally. Further thallium scan was arranged and revealed ischemia change at apex, anterior wall. Then he was admitted for diagnostic CAG.



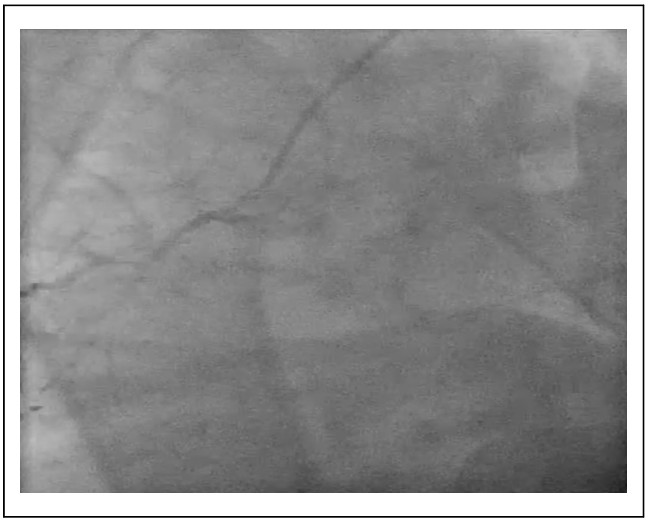
Relevant test results prior to catheterization. Persantin thallium scan revealed apex, anterior wall ischemia.

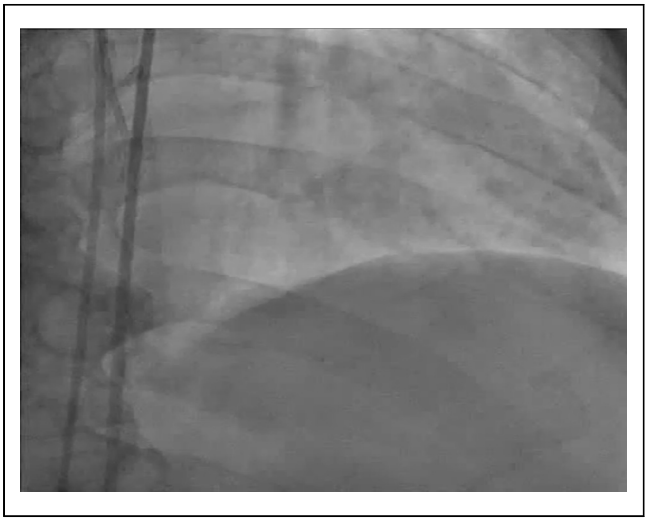


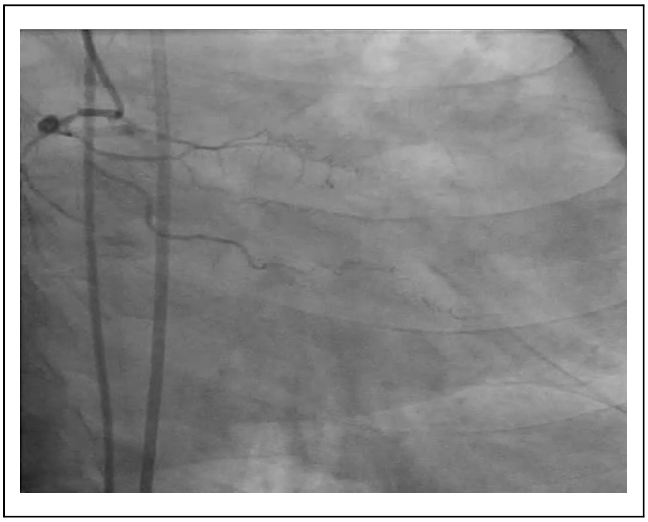




Relevant catheterization findings. CAG via RFA showed CAD with LM+TVD (LM: 50% stenosis; LAD: Os: CTO with heavy calcification, collaterals from LCX-OM and RCA-RV branch; LCX:-P: 70% stenosis with heavy calcification; RCA: non-dominant, diffuse lesion, up to 80% stenosis)

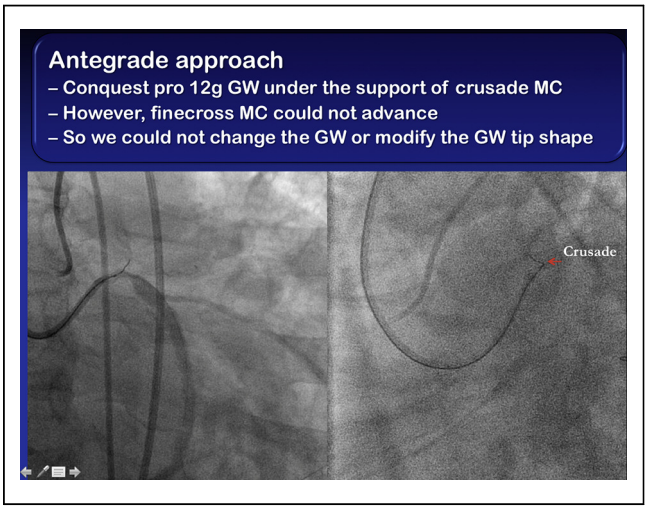


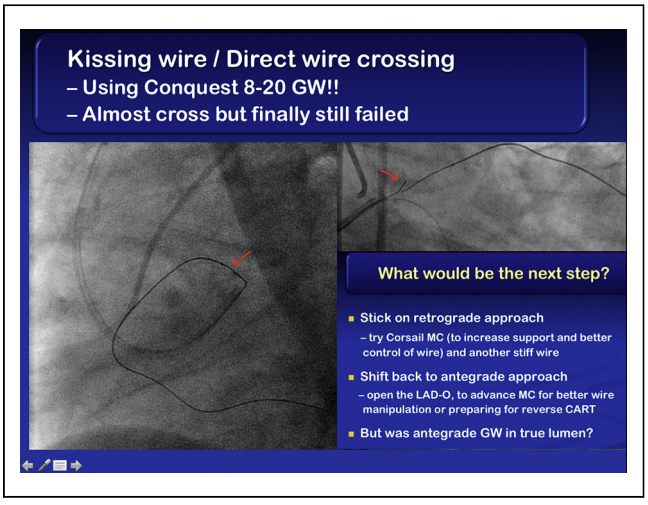


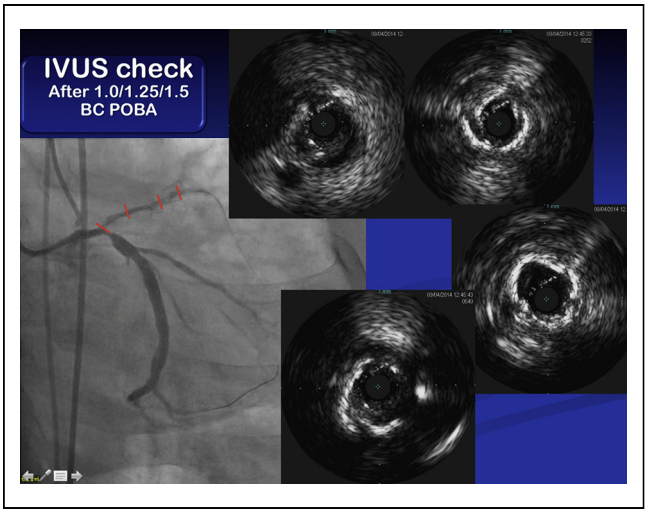


[INTERVENTIONAL MANAGEMENT]

Procedural step. We did PCI via bilateral femoral approach. We engaged LMCA with one XB 3.5/7 GC and RCA with one FR 4/7 GC. We tried antegrade approach first with one Fielder GW followed by Provia 12 and Conquest Pro 8-20 under the support of Crusade microcatheter (MC). Side branch IVUS guided technique was used for identification of LAD ostium. However, due to large angle from LM to LAD, it was so difficult to use a large tip curve to cross CTO. We modified our tip to a very sharp and short curve and then tried to pierce proximal cap under the support of Finecross MC. However, without MC engaging into LAD ostium, we still could not have enough support to cross CTO body. Then we shifted to retrograde approach. We advanced one Sion Blue GW under the support of Finecross MC via LCX-OM collateral to diagonal branch smoothly. After contrast injecting from retrograde MC to confirm true lumen, kissing wire technique was performed with one Conquest Pro 8-20 from antegrade and one Conquest Pro 12 from retrograde approach. Finally, we manipulated antegrade GW to cross the CTO body successfully after engaging one 1.0mm OTW BC into LAD ostium. IVUS check revealed all in the true lumen and 360 degree calcification along the CTO body. Further stenting LM bifurcation lesion with Cullote technique and then LAD CTO lesion was performed sequentially. The final result of LCA was good with TIMI3 flow.







Case Summary. Both antegrade and retrograde approaches are pivotal in the treatment of CTO. Side branch IVUS technique in ostium CTO PCI is useful for identification of the true lumen. In ostium CTO, micro catheter (such as fine cross, corsair and crusade) is indispensable for the modification of wire curve, attack angle and wire support, either in antegrade or retrograde approach.

TCTAP C-105

RCA CTO Treated by Contemporary Reverse CART Using GAIA Third Guidewires Bidirectionally

Yoshiki Uehara[1]

[1]Mito Brain Heart Center, Japan

[CLINICAL INFORMATION]

Patient initials or identifier number. A. K.

Relevant clinical history and physical exam. The patient had a history of CHF and RCA CTO was documented by CAG. PCI for the RCA CTO had been attempted twice; however guidewire was not able to pass the CTO. Therefore, this procedure was third attempt.

[INTERVENTIONAL MANAGEMENT]

Procedural step. Target lesion: Seg. 2-3 (mRCA CTO) Approach: bifemoral

Guiding catheters: 7Fr Launcher AL1SH, EBU3.75SH (Medtronic)

Microcatheter: Corsair (Asahi), Crusade, Mizuki (Kaneka), Guideliner (Japa Lifeline)

Guidewires: Sion, Suoh, XT-R, Gaia First, Gaia Second, Gaia Third, Conquest Pro, Conquest Pro 12, Conquest Pro 8-20, X-treme, RG3 (Asahi)

Balloons: canPass 2.0 mm (Japan Lifeline), Mini Trek 1.2mm, 2.25mm (Abbott), Hiryu Plus 3.75mm, 2.25mm (Terumo), Raiden 3.25mmStents: Xience Xpedition 2.25/28mm, 2.75/33mm, 3.25/28mm (Abbott)IVUS: OptiCross (Boston)A location of entry of the CTO was confirmed by IVUS examination from RV branch. Then operator tried to penetrate proximal cap of the CTO using various guidewires including Conquest series. Consequently, Gaia Third guidewire was able to enter the CTO and antegrade preparation was performed using small balloons. Septal channel was negotiated with XT-R and retrograde system was established. Gaia Third guidewire was also used retrogadely and it crossed the CTO in a contemporary reverse CART manner. After externalization with RG3 guidewire, three DES was placed to the CTO lesion.